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Experience Summary

- Enthusiastic software engineer with around 14 years' experience.
- Concentrate in real time trading applications like Equities, Derivatives and FX trading.
- Extensive experiences in Font Office, FIX protocol, Distributed Cache and Messaging Systems.
- Solid core Java knowledge, multiple threads concurrency, low latency and JVM GC.
- Good knowledge in microservice, distributed system design and implementation.
- AI knowledge in Machine/Deep Learning, Pattern Recognition, Computer Vision etc.
- Familiar with Python and AI related libraries like TensorFlow, Keras, Scikit-Learn etc.
- Well equipped with professional skills, team-work spirit and self-learning ability.

Programming Skill Sets

JavaEE	Spring / Spring boot	Hibernate / JPA / JOOQ
Fix Protocol / Quick Fix	AMQ	Tibco EMS
Solace	Hazelcast	HTML / Javascript
Struts / JSF	JSP / Servlet / DWR	Agile / CI / CD (Jenkins, Hudson)
Python	Tensorflow / Keras	Scikit-learn / Numpy / Panda
Machine / Deep Learning	Neural Networks	Genetic Algorithm

Standard Chartered (Nov 2018 – Present)   Technical Lead

Currently working on eFX and multi-currency pricing trading platform, responsibilities include:

1. Design new microservice and refactor project as an architect.
2. Implement new features like swap trades, cross currency pair pricing, risk control etc.
3. Discuss with BA and Sales about new requirements and provide possible solutions.
4. Mentor new joiners and junior members on technology and business knowledge.
5. Performance tuning for different components.
6. Refactor historical codes for best code readability.
7. Provide Level3 production support and prod issue tracking.
8. Investigate new technologies and tools to improve current project.

Project: SC Aggregation Liquidity Engine (SCALE)

SCALE is a FX trading platform based on microservice architecture with distributed cache.
It is designed in high available structure and running as 7*24 in cluster mode, it is able to handle large volume data per day.

Client could get quotes for different currency pairs (both pre-spot and forwards) by calling our API. With those quotes, they are eligible to post transactions with certain predefined risk control in the system. It provides various of other APIs to clients as well with strict security measures.

As a micro FX transaction system, it connects to downstream system for RFQ and streaming market price handling, and give those prices to clients based on their preferences.
Various types of order aggregation/execution are provided to clients, like Direct Booking, Pass Through, Aggregate by time/volume etc.

It also connects to middle / back office system for settlement, reconciliation etc.
Projects developed in Java using Google Guice, Sparkjava, QuickFix, Hazelcast, JOOQ, Solace, ActiveMQ and Nginx etc.
By adopting hazelcast as cache layer, we ensure the application is highly available and scalable.
Web based admin GUI is developed using reactNative and nodejs.

Citibank (Aug 2016 – Nov 2018)   **Assistant Vice President**

Work on equities high touch front office trading applications, as member of a global team that adapts agile, test-driven and continuous integration practice to the development process.

My responsibilities include:
1. Design and implement certain modules using java.
2. Participate in performance tuning, peer review of code changes for team members.
3. Work closely with traders and business analyst on requirement gathering.
4. Take charge of the application release for different markets in APAC
5. Engage in UAT testing with upstream and downstream applications.
6. Investigate new technologies to improve the project.
7. Provide time-critical technical support for traders and troubleshooting production issues.
8. Work as mentor with junior developers regarding technologies and business.

Project: Citi Order Management Execution Technology (COMET)

COMET is an internally used high touch application for equities trading, includes a set of components like COES(OMS), Trading GUI, CPLS etc.
It connects to Citi downstreams like market connectivity, ALGO, middle office and provides extensive trading functionalities for traders and sales in APAC markets.
Projects developed in Core Java using Spring, Quantum caching, OES framework, Tibco EMS and Fix protocol for communication, Java Swing for GUI and Gradle for build management.
I am a senior developer in this project, responsible for certain modules like order cross, late cross report to exchange, order and execution upload, corp action order, GTC/D orders and cancellations etc.

ION Trading (Patsystems Group)   Senior Software Developer
Sep 2010 – Aug 2016

ION Trading delivers complete trading solutions for major Exchange Traded Derivatives (ETD) and Equities exchanges - Front Ends, Order Management System (OMS), Back Office System, Risk System and Exchange Connectivity.
Responsibilities:
1. Work on a powerful front-end trading GUI used by various clients like Hedge funds, investment banks, and brokers etc.
2. Participate into a trading platform design and implementation for futures and options in different exchanges.
3. Take charge of a clearing and back office system.
4. Performance tuning for high concurrency and huge data records.
5. Integrate different projects into a whole trading solution with in house trading API and protocol.
6. Build a whole continuous integration process for different projects with Hudson and Maven.
7. Enforced clean code for best code readability and maintenance.
8. Agile and scrum methodologies adopted in different projects.

Project: Pats Trading Application GUI (PTA)

PTA is a powerful frontend trading GUI for futures, options and strategies.
I am main developer in this project; work closely with London team members in requirement analysis, code design, function implementation and performance tuning.
Work on the modules like strategy creation, order placement, commission and margin calculation, profit & loss calculation, price volume alert and so on.
Technologies used: Java, JNLP, swing, awt, socket, multiple threads.
With scrum adopted in the whole team, code review for everyone in each sprint, and Continuous Integration was built based on Hudson and Maven.

Project: Global Trading System (GT)

GT is a derivative trading platform which mainly focus on Futures and Options, it contains a set of components: OMS, Reports and Monitor, Exchange Connectivity.
I worked on Reports and Monitor components, from design to implementation.
Technologies used: java, spring, hibernate, gigaspace, lightstreamer, Apache MQ, Oracle.
Use gigaspace in this project to make sure the system's capability for the high concurrency. And use lightstreamer push data from backend to frontend instead of using the interval ajax poll, make sure the data can be displayed completely in real time.

Silicon Storage Technology Inc   **Software Developer**
Nov 2008 – Jul 2010

Work on an in-house CRM system named 'e-Flash' on the improvement and enhancements.
Technologies used: Java, JSF, Web Flow, Spring, hibernate, Oracle, PL/SQL.
Effectively participated in communications with production team on requirement analysis.
Do enhancements and provide daily supports for other software systems as well.

Avepoint Inc   **Java Developer**
Jul 2007 – Sep 2008

Avepoint is a global technology company and delivers a powerful software product named 'DocAve'. It is based on java and c#. I worked on several modules in DocAve as a java developer, like 'Migration Report', 'System Recovery' etc. Technologies used: HTML, Javascript, JSP, Servlet, DWR, spring, hibernate.

Education

National University of Singapore	Master	Artificial Intelligence	2019/1 - 2021/2
ChangChun University of Technology	Bachelor	Computational Science	2003/9 - 2007/6